

CLAIMS:

1. Method of transforming pixel values of a first video signal into respective pixel values of a second video signal, on basis of the luminance-to-light transfer characteristic of a display device, comprising:

- band-splitting the first video signal into a first high-frequent signal and a first
5 low-frequent signal;
- transforming the first high-frequent signal into a second high-frequent signal on basis of a first transfer function;
- transforming the first low-frequent signal into a second low-frequent signal on basis of a second transfer function which is different from the first transfer function; and
10 - combining the second high-frequent signal and the second low-frequent signal into the second video signal.

2. A method as claimed in claim 1, characterized in that the first transfer function is substantially equal to the inverse of the luminance-to-light transfer characteristic of the
15 display device.

3. A method as claimed in claim 1, characterized in that the first transfer function is substantially equal to the inverse of a combination of a pre-correction function in a video source from which the first video signal originates and the luminance-to-light transfer
20 characteristic of the display device.

4. A method as claimed in any of the claims above, characterized in that the second transfer function is based on the first video signal.

25 5. A method as claimed in claim 2, characterized in that the second transfer function is substantially equal to the inverse of a pre-correction function in a video source from which the first video signal originates.

6. A method as claimed in any of the claims above, characterized in that the second transfer function is based on a predetermined contrast enhancement as required by a viewer.

- 5 7. A method as claimed in any of the claims above, characterized in comprising
- splitting the first video signal into a first horizontal high-frequent signal, a first vertical high-frequent signal and the first low-frequent signal;
 - transforming the first horizontal high-frequent signal into a second horizontal high-frequent signal on basis of the first transfer function;
 - 10 - transforming the first vertical high-frequent signal into a second vertical high-frequent signal on basis of a third transfer function which is different from the first transfer function; and
 - combining the second horizontal high-frequent signal, the second vertical high-frequent signal and the second low-frequent signal into the second video signal.

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8. An image-processing unit for transforming pixel values of a first video signal into respective pixel values of a second video signal, on basis of the luminance-to-light transfer characteristic of a display device, comprising:

- a band-split filter for band-splitting the first video signal into a first high-frequent signal and a first low-frequent signal;
- 20 - a first pixel value transformation unit for transforming the first high-frequent signal into a second high-frequent signal on basis of a first transfer function;
- a second pixel value transformation unit for transforming the first low-frequent signal into a second low-frequent signal on basis of a second transfer function which
- 25 is different from the first transfer function; and
- a combining unit for combining the second high-frequent signal and the second low-frequent signal into the second video signal.

9. An image-processing apparatus comprising:

- 30 - a receiving unit for receiving a first video signal; and
- the image-processing unit as claimed in claim 7.

10. An image-processing apparatus as claimed in claim 8, characterized in comprising the display device for displaying images on basis of the second video signal.

11. A TV comprising the image-processing apparatus as claimed in claim 10.

12. An image-processing apparatus as claimed in claim 10, characterized in that
5 the image-processing apparatus is a monitor to be connected to a computer.